

*W. J. ...*  
(ii) cleaving diverse polymers from the solid substrate by cleaving the cleavable linkers, thereby creating a mixture of diverse unbound polymers; and

(iii) measuring [a property of the mixture] presence of diverse unbound polymers as an indicator of the efficiency of the synthesizing step.

*2/1/01*  
*Amended*  
*Sub*  
*1/1*  
2. (Twice Amended) The method of claim 39, wherein each of the labeled polymers comprises a single isomeric label [optical isomer].

3. (Amended) The method of claim 39, wherein the labeled unbound polymers are heterogeneous by number of monomeric units [size], and wherein the method further comprises separating the labeled unbound polymers by number of monomeric units [size].

4. (Amended) The method of claim 39, wherein the labeled unbound polymers are heterogeneous by number of monomeric units [size], and wherein the method further comprises separating the labeled unbound polymers by charge using ion exchange chromatography.

5. (Amended) The method of claim 39, wherein each of the labeled unbound polymers are heterogeneous by number of monomeric units [size], and wherein the method further comprises separating the labeled unbound polymers by number of monomeric units [size] using capillary gel electrophoresis.

*Fig 2*  
10. (Amended) A method for measuring the effect of altering a polymer array synthesis protocol, comprising:

*E2*  
(i) synthesizing an array of diverse polymers occupying different regions on a planar surface on a solid support by a first synthesis protocol, thereby creating a reference array of polymers;

(ii) synthesizing an array of diverse polymers occupying different regions on a planar surface on a solid support synthesized by a second synthesis protocol, wherein the second synthesis protocol is different than the first synthesis protocol, thereby creating a test array of polymers;

(iii) cleaving separately the reference array of polymers and the test array of polymers, thereby creating a mixture of diverse cleaved polymers from the reference array and a mixture of diverse cleaved polymers from the test array;

(iv) measuring [a property of the mixture] presence of diverse cleaved polymers from the test array as an indicator of the efficiency of the first synthesis procedure and measuring [a property of the mixture] presence of diverse cleaved polymers from the reference array as an indicator of the efficiency of the second synthesis procedure, thereby determining whether a difference between the first and second synthesis procedures affects the efficiency of the second synthesis procedure.

*E3*  
15. (Amended) The method of claim 14, wherein the label is a single isomeric label [optical isomer].